

REMARKS

This application has been reviewed in light of the Office Action dated October 9, 2003. Claims 1-13 are now pending. Claims 1-4 have been amended to even further clarify the claimed subject matter.

The Office Action rejected Claims 1, 3 and 5-13 under 35 U.S.C. § 102(b) as being anticipated by European Patent Application EP 0 726 591 A1 (Suzuki et al.), hereinafter Suzuki '591.

Independent Claim 1, as amended, is directed to a method of manufacturing an electron source. The method comprises the step of forming, on a substrate, a plurality of row wirings, a plurality of column wirings, and a plurality of pairs of conductive films arranged in a matrix by the pluralities of row and column wirings, each pair of conductive films being formed through a gap. The method also comprises a first voltage application step of selecting a row wiring among the plurality of row wirings in the presence of an activation substance source, and applying a substantially same constant voltage to each of a plurality of pairs of conductive films connected to the selected row wiring. The method also comprises a second voltage application step of applying a voltage having a voltage drop rate of 10 V/sec or more to at least specific pairs of conductive films among a plurality of pairs of conductive films.

The Office Action relies on Col. 19, lines 39-45 and lines 46-57 of Suzuki '591 in support of the § 102(b) rejection. However, Col. 19, lines 39-45 of Suzuki '591 discloses an activation voltage source 1 that outputs a pulse of an output voltage waveform

shown in Fig. 21, where the pulse width T1 is 1 msec, the pulse interval T2 is 2 msec, and the voltage wave peak value is 14V. Moreover, Col. 19, lines 46-57 discloses that when the electron-beam source substrate 4 has an NxM matrix, M switches are arranged in parallel as sw1 to swM, and connected to x-wire terminals Dx1 to DxM of the electron-source substrate 4 via lines Sx1 to SxM. However, nothing in Suzuki '591 would teach or suggest, as set forth in Claim 1, a method of manufacturing an electron source comprising, inter alia, a second voltage application step of applying a voltage having a voltage drop rate of 10 V/sec or more to at least specific pairs of conductive films among a plurality of pairs of conductive films.

Since Suzuki '591 does not teach or suggest the foregoing features of Claim 1, Suzuki '591 cannot anticipate Claim 1 since it is well-established that, "[a] claim is anticipated only if each and every element as set forth in the claim is found in a single prior reference." Verdegall Bros. V. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added).

For the foregoing reasons, it is believed that Claim 1 is patentable over Suzuki '591 and thus withdrawal of the rejection of that claim is respectfully requested.

Independent Claim 3 is also a method claim reciting features that are substantially similar to those of Claim 1 emphasized above relating to a second voltage application step, and also is believed to be clearly patentable over Suzuki '591 for substantially the same reasons as those presented above with respect to Claim 1.

The Office Action also rejected Claims 2 and 4 under 35 U.S.C. § 103(a) as

being unpatentable over Suzuki '591 in view of European Patent Application EP 0 729 168 A2 (Suzuki et al.), hereinafter Suzuki '168.

Independent Claims 2 and 4 each recite a second voltage application step like that recited in Claim 1. For the reasons given above, nothing in Suzuki '591 would teach or suggest those features.

Suzuki '168 is cited in the Office Action as disclosing a voltage set to compensate for influence of a voltage drop caused by the selected row wiring and a second voltage application step of applying a predetermined voltage to at least specific pairs of conductive films, "so that the unselected surface conduction electron-emitting devices do not attain a floating state... and the voltage applied to the device is not diverted to the matrix wiring and deterioration of the electron emission portions is prevented...."

However, nothing in Suzuki '168 would teach or suggest a method of manufacturing an electron source, wherein a second voltage application step comprises applying a voltage having a voltage drop rate of 10 V/sec or more to at least specific pairs of conductive films among a plurality of pairs of conductive films, as recited in Claims 2 and 4.

Accordingly, since neither Suzuki '591 nor Suzuki '168 teaches or suggests the mentioned features of Claims 2 and 4, even if those references were to be combined in the manner proposed in the Office Action, (which, in any event, is not admitted as having been obvious or technically feasible), the resulting combination also would not teach or suggest those features.

As such, Claims 2 and 4 are each deemed clearly patentable over those references whether considered separately or in combination.

The other, dependent claims in this application depend from base Claim 1, and also are believed to be patentable, at least for the reason that each depends from a patentable base claim. Since each dependent claim is also deemed to define an additional aspect of the invention, however, individual reconsideration of the patentability of each dependent claim on its own merits is respectfully requested.

REQUEST FOR CORRECTION OF FILING DATE

The Office Action bears a date of "2/18/2000" under "FILING DATE" on the cover page thereof. This filing date, however, is incorrect for the present application because the application actually was filed on December 21, 1999 (12/21/99), as evidenced by the copy of the return postcard bearing the Patent and Trademark Office's official stamp of receipt. Applicant notes that the stamped postcard is *prima facie* evidence that the application was in fact filed on December 21, 1999 (rather than on 02/18/2000).

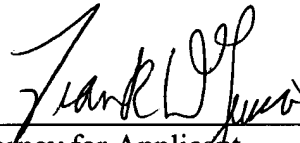
In view of the foregoing paragraph, the Patent and Trademark Office is respectfully requested to correct the record to indicate that the present application has a filing date of December 21, 1999. If this request is not granted, the Patent and Trademark Office is respectfully requested to explain in detail why this application should not be entitled to the December 21, 1999 filing date.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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Assistant Commissioner for Patents
Washington, D.C. 20231

Date 12, 21, 99
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Atty. Docket 862-3180

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